

12 microorganism; and

F1 13 (c) comparing said induced spectrum of step (b) with said characteristic
14 spectrum to detect the presence of said microorganism in said sample, the sample having at least
15 200 fold immobilized antibodies in excess of target antigen.

1 12. (Twice Amended) A system for the detecting the presence of a specific
2 microorganism in a sample, said microorganism having a characteristic resonance enhanced
3 Raman backscattered energy spectrum produced by irradiating nucleic acids in said
Sub G3 4 microorganisms at a wavelength between 242-257 nm, comprising:

F2 5 (a) means for contacting said sample with a medium comprising solid phase
6 immobilized antibodies which specifically bind to a characteristic cell surface antigen on said
7 microorganism to form an antigen-antibody complex, thereby immobilizing said microorganism
8 on said solid phase, the solid phase antibodies being at least 200 fold in excess of antigen, the
9 [said] antibodies emitting essentially no resonance Raman spectra that interfere with the
10 resonance Raman spectra of said microorganism when irradiated with a laser light of 242-257
11 nm ;

12 (b) means for irradiating the solid phase of step (a) with a laser light of 242-
13 257 nm to produce a resonance enhanced Raman backscattered energy spectrum; and

14 (c) means for comparing said induced spectrum of step (b) with said
15 characteristic spectrum to detect the presence of said microorganism in said sample.

REMARKS

The Office Action of July 10, 2001 has been received and the comments of the Examiner carefully considered.